

## Monday Morning, September 21

7:30 am	User Meeting Registration Desk opens	Mezzanine	
	Continental Breakfast Available	Ballroom North	
9:00 am	Plenary Session Ballroom South		
	Moderator: Quanxi Jia		
	Welcome, Introductions and CINT Update		
	Neal Shinn, CINT Director		
9:20 am	Ian Robertson		
	University of Wisconsin-Madison		
	Dynamic Studies of Dislocation Behavior in Metal System		
10:00 am	Break		
10:20 am	Carlo Montemagno		
	University of Alberta		
	Engineering Living Materials Thru the Precision Assembly of Biologically Functional		
	Abiotic/Biotic Materials		
11:00 am	Claus Ropers		
	University of Göttingen		
	Ultrafast Electron Microscopy and Diffraction Using Nanoscale Photoemitters		
11:40 am	Buffet Lunch	Ballroom North	
11:40 am		Mezzanine	
	Informal poster viewing	Mezzannie	

## Monday Afternoon, September 21

Symposia	Hybrid Photonic Materials	Real-time imaging of	Nanomotors & Molecular
	Interactions for Integration	controlled nanoscale	Machines: Understanding
	and Novel Response	phenomena using S/TEM	and Controlling the Catalytic
			Transport of Matter
	Moderators:	Moderators:	Moderators:
	Steve Doorn & Han Htoon	Katie Jungjohann & Nate Mara	George Bachand & Wally Paxton
1:00 pm	Elaine Li	Brad Boyce	Henry Hess
	University of Texas	Sandia National Laboratories	Columbia University
	Novel Optical Properties of a Few Coupled Nanoparticles	Detecting the Onset of Fatigue	Engineering with Biomolecular Motors
	Tew Coupled Nanoparticles	Damage in Nanocrystalline Metals	Wiotois
1:30 pm	William Tisdale	Nan Li	Alex Levine
1.50 pm	Massachusetts Institute of Technology	Los Alamos National Laboratory	University of California, Los Angeles
	Exciton Dynamics in Quantum	Exploring Deformation	Photophysics of carbon
	Dot Films and Interfaces	Mechanism in TiN through	nanotubes and layered
		High-resolution In Situ TEM	semiconductors
2.00	Mathew Mayo	Juri Wehrs	Wei Gao
2:00 pm	Mathew Maye Syracuse University	Juri Wenrs   EMPA – Swiss Federal Laboratories	University of California, Berkeley
	Using Semiconductive Quantum	for Materials Science and Technology	Artificial Nanomachines and
	Rods as Energy Acceptors in	Variable temperature time	their Biomedical Applications
	Bioluminescence Resonance	dependent plasticity of	1 1
	Energy Transfer	nanocrystalline Nickel thin films	
		determined using	
		microcompression	
2:30 pm	Chris Murray	Eray Aydil	Adrienne Greene
	University of Pennsylvania	University of Minnesota	Sandia National Laboratories
	TBD	Thin film Solar Cells Based on	Characterization and
		the Earth Abundant Solar Absorber Cu <sub>2</sub> ZnSn(S <sub>x</sub> Se <sub>1-x</sub> ) <sub>4</sub>	Functionalization of Microtubules for Use in Materials
		From Colloidal Nanocrystal	Applications
		Dispersions	rippiications
3:00 pm	Break	Break	Break
3:30 pm	Nicolas Izard	Kevin Zavadil	Zev Bryant
	University of Montpellier	Sandia National Laboratories	Stanford University
	s-SWNT Integration into Active	TBD	TBD
4.00	Photonic Devices	W. A. C.	A C 1
4:00 pm	Han Htoon	Katerina Aifantis	Arne Gennerich
	CINT Doped Carbon Nanotubes: New	University of Arizona TEM and SEM Examination of	Albert Einstein College of Medicine  Dynein Motion and Force
	Building Blocks for Quantum	Deformation and Fracture in Si	Generation Studied by Optical
	Information Technologies	and Sn Based Nanostructured	Trapping Nanometry
		Anodes	11 0
4:30 pm	Yuichiro Kato	Jane Chang	
	University of Tokyo	University of California, Los Angeles	
	Single-Carbon-Nanotube	In-situ characterization of ultra-	
	Photonics and Optoelectronics	thin solid electrolyte for 3-D	
<b>7</b> 00	D	microbattery applications	
5:00 pm	Poster Session (Mezzanine)		
7:00 pm	End of session, please enjoy din	ner on your own	

## Tuesday, September 22

7:30 am	Registration Desk Open Breakfast		Mezzanine Ballroom North
	Panel Discussion (All welcome): CINT Strategic Planning Don Lucca, Chair, Users Executive Neal Shinn, CINT Director Quanxi Jia, CINT Co-Director		Ballroom South
8:30 am	Hybrid Photonic Materials Interactions for Integration and Novel Response	Real-time imaging of controlled nanoscale phenomena using S/TEM	Nanomotors & Molecular Machines: Understanding and Controlling the Catalytic Transport of Matter
	Jean-Sebastien Lauret ENS de Cachan 2D and 1D Excitons in Cavities		
9:00 am	Alexander Hogele  LMU Munich  Photophysics of Carbon  Nanotubes and Layered  Semiconductors	Barry Carter University of Connecticut Thoughts on Operando TEM	Peter Goodwin  CINT  Cellobiohydrolase Binding on  Cellulose Observed by Time- Resolved, Super-Resolution  Single Molecule Imaging
9:30 am	Tony Heinz Stanford University Optical properties of atomically thin semiconductors layers and heterostructures	Dave Mitlin Clarkson University Coupling in-situ TEM and ex-situ analysis to understand heterogeneous sodiation of antimony	Virginia Vandelinder Sandia National Laboratories Understanding initiation mechanisms and controlling properties of microtubule spools
10:00 am	Break	Break	Break
10:30 am	Nick Vamivakas University of Rochester Nanophotonics with Atomically Thin Semiconductors	Narayanan Ravishankar Indian Institute of Science, Bangalore Insights into Nucleation and Growth of Nanostructures Using In-Situ Electron Microscopy	Igor Aronson Argonne National Laboratory Individual and Collective Behavior of Microswimmers in Liquid Crystals
11:00 am	Xiaodong Xu University of Washington Excitons in 2D Semiconductors and Heterostructures	Angela Rudolph University of Washington Drying Effect Creates False Assemblies in DNA-Coated Gold Nanoparticles as Determined Through In-Situ Liquid Cell STEM	Suzanne Ahmed Pennsylvania State Acoustically Propelled Nanomotors
11:30 am	Aditya Mohite Los Alamos National Laboratory Phase Engineering of Transition Metal Di-Chalcogenides for Optoelectronic Applications	Ilke Arslan Pacific Northwest National Laboratory TBD	Concluding Remarks by Symposium Organizers  ***End of Symposium***
12:00 pm	Concluding Remarks by	Concluding Remarks by	
<b>F</b>	Symposium Organizers	Symposium Organizers	
12:15 pm		***End of Symposium***	